



6

ENVIRONMENTAL SUSTAINABILITY, HEALTH & SAFETY

Ensuring a high level of environmental quality in Belmont Village is integral to maintaining and enhancing community health, safety, and quality of life. The purpose of this chapter is to establish goals and policies that, in combination with General Plan policies and other local, State, and federal regulations, mitigate the potential negative effects of natural and man-made environmental hazards that threaten public health and safety, as well as the ecological systems in Belmont and the surrounding region. Specifically, this chapter addresses hydrology and flooding, habitats and wildlife, noise, and hazards that impact residents' safety. Policies are designed to augment and reinforce those of the General Plan.

6.1 HYDROLOGY AND FLOODING

The protection of regional water resources and quality in the Planning Area is an important local responsibility because of the numerous beneficial uses of the hydrologic system. These beneficial uses regionally and locally include municipal, domestic, and industrial water supplies; ground water recharge; navigation; recreation; and habitat for warm and cold freshwater biota, wildlife, and rare and endangered species. This section provides an overview of water resources, water quality issues, and flooding risk in the Planning Area. Water supply and demand are discussed in Chapter 5: Infrastructure and Public Services.

HYDROLOGY OF THE BELMONT VILLAGE PLANNING AREA

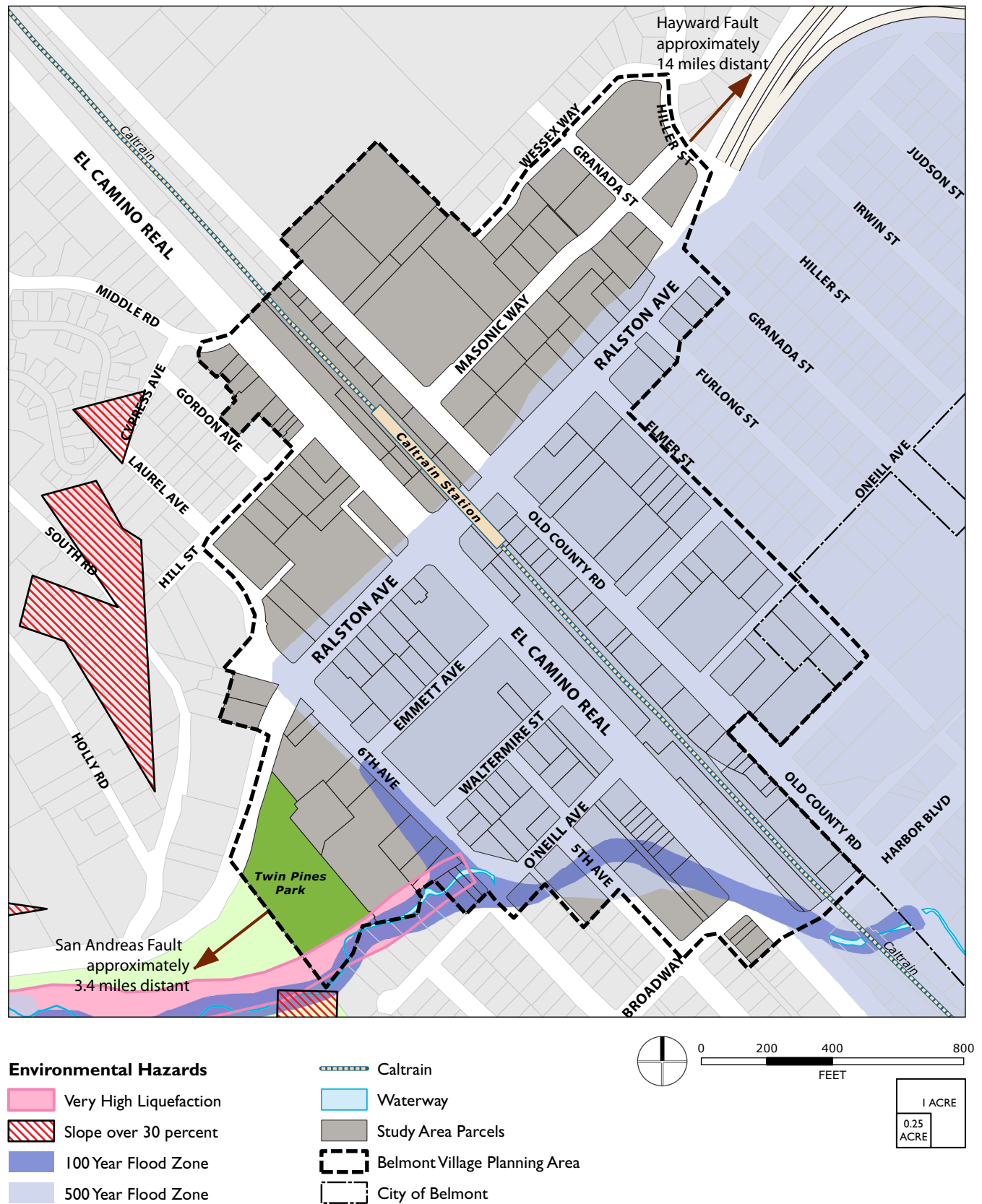
The Planning Area is bordered on the southeast by Belmont Creek, which originates in the hills above Hallmark Drive and flows from the western hills towards the San Francisco Bay. Belmont Creek, shown in Figure 6-1, runs above the surface through Twin Pines Park and into a culvert under Sixth Avenue, where it then flows underground across O'Neill Avenue, Fifth Avenue, and El Camino Real, surfacing again outside of the Planning Area boundary near the Caltrain tracks and Harbor Boulevard.

The Planning Area's potable water is supplied by the Mid-Peninsula Water District, which does not draw on groundwater from wells to service the population. However, some private residences in Belmont may have private wells, which are addressed in Section 26 of the Belmont Municipal Code.



Belmont Creek runs through Twin Pines Park and through the southeast side of the Planning Area.

FIGURE 6-1: ENVIRONMENTAL RESOURCES & CONSTRAINTS



Source: California Geological Survey, 2006; National Elevation Dataset, USGS 2015; The Bay Area Conservation Land Network, 2015; Association of Bay Area Governments, 2015; FEMA, 2016; City of Belmont, 2015; Dyett & Bhatia, 2016.

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WATER QUALITY



Waterdog Lake, upstream of the Planning Area, is an important part of Belmont's hydrologic system and can affect downstream water quality.

With urban development, a wide variety of nutrients and toxic substances are introduced into surface and ground water. Impacts to water quality result from runoff during dry and wet weather events, direct discharge associated with industrial/commercial activities, automobiles, and herbicides. Pollutant sources may be generated from past waste disposal practices and chemicals and fertilizers applied to landscaping. Contaminants may include sediment, PCBs/mercury, hydrocarbons and metals, pesticides, nutrients, bacteria, and trash.

Maintaining and improving stormwater and urban runoff quality before it enters surface waters or groundwater is essential to protecting water quality, public health, wildlife, and the overall environment. Water pollution can be reduced through effective stormwater management, construction practices, and appropriately designed development. In November 2015, the Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (No. CAS612008) was adopted by the San Francisco Bay Region of the California Regional Water Quality Control Board to address stormwater pollution prevention, and it covers stormwater discharges from municipalities and local agencies. The NPDES Permit requires jurisdictions to implement programs and activities to reduce pollutants in storm water and urban runoff under Provision C.3. New Development and Redevelopment. The NPDES Permit, the storm drainage infrastructure system in the Planning Area, and low impact development are discussed in Chapter 5: Infrastructure and Public Services. Policies in this section will help to further protect water quality in the Planning Area.

FLOOD-RISK AREAS

The southeastern boundary of the Planning Area runs along the Belmont Creek, whose floodway is within the 100-year Flood Zone (areas subject to inundation by the one percent annual chance flood event), as shown in Figure 6-1. In addition, the bulk of the Planning Area also lies within the 500-year Flood Zone, which extends east of Ralston Avenue and north of Sixth Avenue. The flow of stormwater to these natural drainage areas will increase as a result of new development in the area, which will in turn increase flooding risk.

In the area to the southeast of the Planning Area in the Harbor Industrial Area, the lower portions of Belmont Creek have experienced periodic flooding during winter weather events. The City is in the process of collaborating with the Department of Fish and Wildlife, US Army Corps

of Engineers, the San Francisco Bay Regional Water Quality Control Board, the cities of San Carlos and Redwood City, San Mateo County, and Caltrans to identify and implement a long-term approach to address flood control solutions, ongoing maintenance, and creek improvements.

GOALS AND POLICIES

GOAL 6.1 Preserve natural environmental processes that protect health and safety, such as water filtration through soil that protects water quality and riparian vegetation that minimizes erosion and flooding.

Policy 6.1-1 Design storm drainage and flood control structures to minimize erosion and creek sedimentation and to preserve and enhance the wildlife habitat and vegetation of Belmont Creek. *See also Policies 5.1-5 – 5.1-8 in the Infrastructure and Public Services chapter.*

GOAL 6.2 Minimize the potential for loss of life, injury, property damage, and economic and social disruption resulting from natural and man-made hazards, including floods.

Policy 6.2-1 Ensure new projects within the 100-year Flood Zone are designed to reduce flood risk. Strategies include site planning to minimize flood risk and applying flood safe standards to new construction.

Policy 6.2-2 Continue to collaborate on and implement efforts to restore Belmont Creek and enhance ecological functions, biological resources, hydrology function, and flood control.

6.2 HABITAT AND WILDLIFE

Belmont is generally a developed area with some large areas of natural open space, and it is neighbored by other cities to the north, south, and east, and the Crystal Springs watershed lands for the San Francisco Public Utilities District to the west. The Planning Area itself has little undeveloped land, though it does include the eastern edge of Twin Pines Park, which is home to coastal and valley oaks, as well as Belmont Creek. The City's Tree Ordinance and General Plan provide guidance on best management practices for tree protection and removal.



San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*)

Special status species found in and around the Planning Area are shown in Figure 6-2. The San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) is a federally-listed Endangered Species that has been recorded in the Belmont area. Additionally, three special status species have been recorded in the Planning Area vicinity. They are the Alameda song sparrow (*Melospiza melodia pusillula*), the pallid bat (*Antrozous pallidus*), and the Santa Cruz kangaroo rat (*Dipodomys venustus venustus*). Figure 6-3 shows the habitat types found in and around the Planning Area, including valley oak woodland, coastal oak woodland, montaine hardwood, lacustrine, and saline emergent wetland.



Alameda song sparrow (*Melospiza melodia pusillula*)



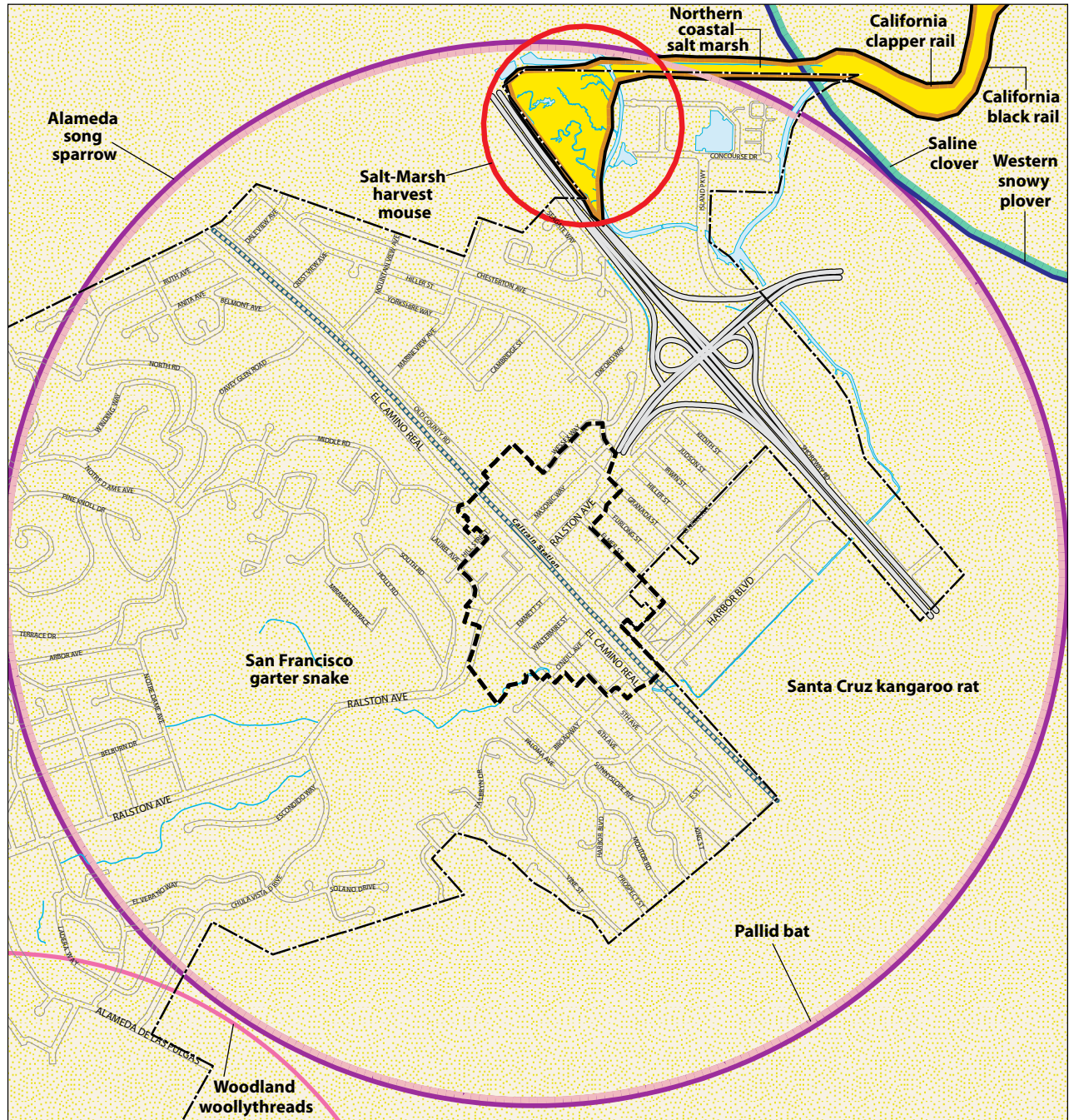
Pallid Bat (*Antrozous pallidus*)



Santa Cruz kangaroo rat (*Dipodomys venustus venustus*)

Images Source: Flickr Creative Commons

FIGURE 6-2: BIOLOGICAL RESOURCES—SPECIAL STATUS SPECIES



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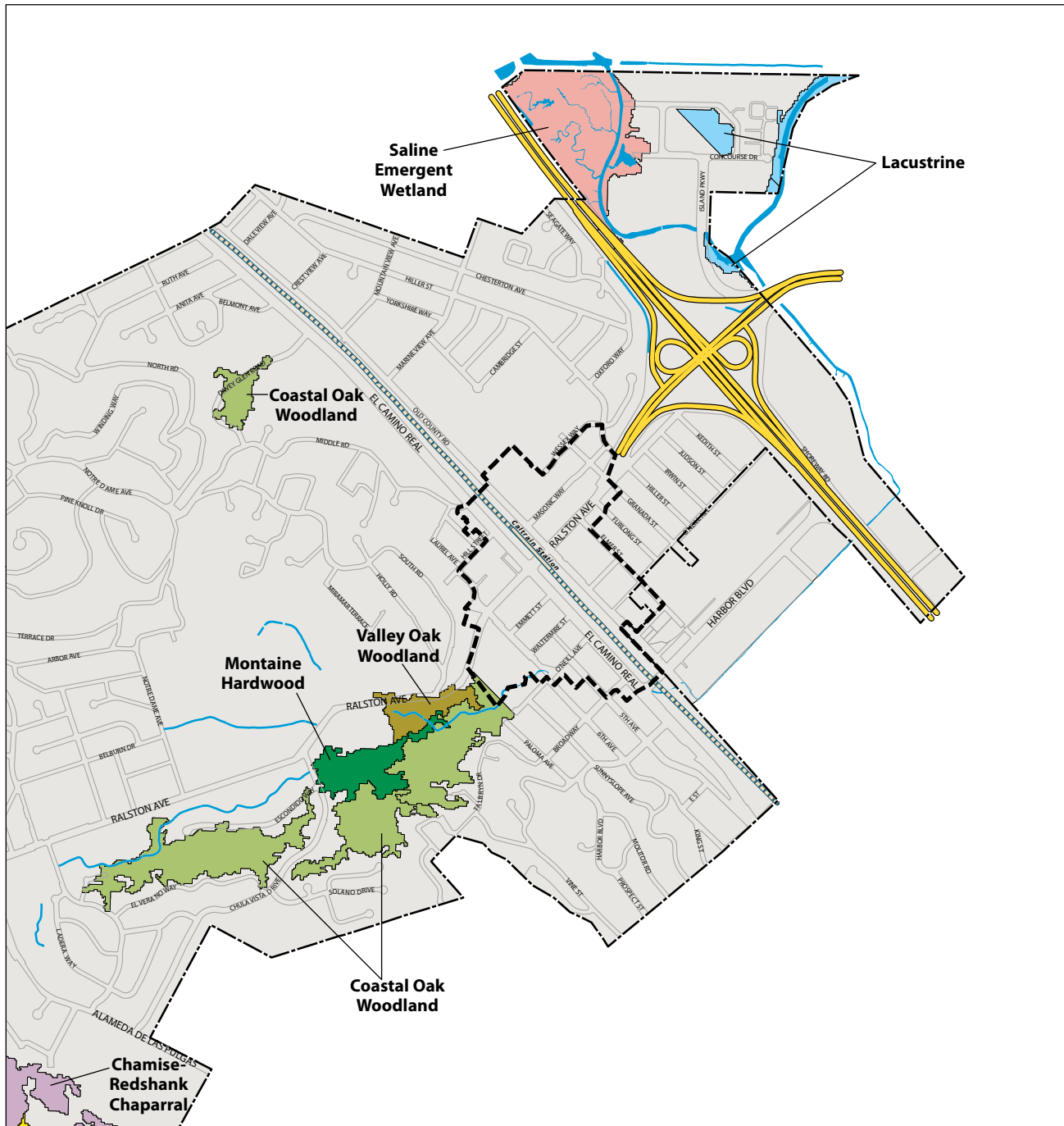
10 ACRE
2.5 ACRE

*Special Status Species information presented in this map is based on data from CNDDDB version September 2015. Areas of occurrence on this map represent areas in which known locations of the species listed here have been found as of the date of this version. There may be additional occurrences of other species within this area which have not yet been mapped. Lack of information in the CNDDDB about a species or an area can never be used as proof that no special species occur in an area. CNDDDB can be contacted for more information about these occurrences.

Source: California Natural Diversity Database (CNDDDB), 2015; City of Belmont GIS, 2014; Dyett & Bhatia, 2016.

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FIGURE 6-3: HABITAT TYPES



Source: Vegetation Classification & Mapping, United States Department of Agriculture Forest Service, 2013; City of Belmont GIS, 2014; Dyett & Bhatia, 2016.

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GOALS AND POLICIES

GOAL 6.3 Protect and improve the quality of biological resources and habitat areas in the Planning Area.

- Policy 6.3-1** Ensure that development does not disturb sensitive habitat and special status species by requiring appropriate and feasible mitigation measures. If Endangered or Threatened Species are discovered prior to or during construction of a development project, require project proponents to consult a qualified biologist for proper action and to develop adequate measures to avoid or mitigate impacts.
- Policy 6.3-2** Maintain the Belmont Creek corridor west of Sixth Avenue as a functional wildlife corridor and habitat linkage. Provide an appropriate buffer, using landscaping, to preserve and protect the creek water quality. Where feasible, allow public access in the form of open space or a multi-use trail along the creek corridor. Incorporate interpretive signage for educational purposes in public access areas along the creek and in Twin Pines Park.
- Policy 6.3-3** Promote the development of new parks or public spaces in the Planning Area that provide both human and habitat services.
- Policy 6.3-4** Encourage property owners, business owners, and residents to use native plants in landscaping. *See also streetscape standards and guidelines in the Urban Design chapter.*

6.3 HAZARDS

The Belmont Village Specific Plan must address any public health risks due to geologic and seismic conditions, contaminated sites, and toxic air contaminants. Flooding risk, which is also a concern in the Planning Area, is addressed in Section 6.1. This section describes these hazards and includes policies designed to reduce the potential risks associated with Plan buildout.

SEISMIC AND GEOLOGIC HAZARDS

The San Francisco Bay Area is one of the most seismically active regions of the United States. There are approximately 30 known faults in the Bay Area that are considered capable of generating earthquakes. A major earthquake is the worst expected hazard in the city. There are no active fault lines within the city boundary, and the closest fault zone, the San Andreas Fault Zone—Peninsula, is located about 3.4 miles from the Planning Area's western boundary. The San Andreas Fault Zone is the predominant fault system in California and has generated some of the largest and most destructive earthquakes in history.

Figure 6-1 shows potential seismic and geological hazard locations in the Planning Area. Liquefaction from seismic events may result in low to moderate risk to the southeast portion of the Planning Area, particularly along Belmont Creek. Ground shaking, however, could bring serious damages, as the entire city has a MMI (Modified Mercalli Intensity) Shaking Severity Level of 8 (Very Strong). The Planning Area also contains areas with a low probability of landslides. These areas, which are found on the southwestern edge along Sixth Avenue and Hill Street, are adjacent to areas with slopes over 30 percent just to the west of the Planning Area.



While most of the Planning Area is relatively flat, Belmont is characterized by hillside neighborhoods where geologic hazards may exist.

CONTAMINATED SITES

Hazardous materials are substances with physical or chemical properties that pose an existing or potential future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials and wastes are extensively regulated by federal, State, regional, and local regulations. Several opportunity sites in the Planning Area face challenges associated with previous uses on the sites, some of which have resulted in contamination that must be cleaned up before new uses can be developed.

Areas within the Belmont Village PDA with known or suspected release of hazardous materials to soil and groundwater, and where current cleanup activities monitored by the State Water Quality Control Board or the California Department of Toxic Substances are active, are shown in Figure 6-4 and listed in Table 6-1. Most of the sites are Leaking Underground Storage Tank (LUST) sites, which are scattered throughout the Planning Area; many of these sites are automobile-related, such as gas stations or auto repair shops. The Planning Area also contains multiple sites currently undergoing cleanup for hazardous materials contamination, and one site being remediated by the Department of Toxic Substances Control (DTSC). Some contaminated sites are on vacant parcels or properties with the potential to redevelop. Contamination does not render these sites unusable, but may require time and funding for cleanup, and in some cases, may limit allowable land uses.



Most of the hazardous materials sites in Belmont are Leaking Underground Storage Tanks (LUSTs).

Table 6-1: Hazardous Materials Sites in Planning Area

Site Name ¹	Address	Status ²
Cleanup Program Site		
Immaculate Heart Of Mary	1040 Alameda de Las Pulgas	Completed - Case Closed
Brusco Property	248 Harbor Blvd	Open - Site Assessment
Former Baron-Blakeslee (Purex)	511 O'Neill Ave	Open - Remediation
New Mode Cleaners	615 Harbor Blvd	Open - Inactive
Quan Property	847 Old County Rd	Open - Inactive
LUST Cleanup Site		
Wong Family Trust	1000 El Camino Real	Completed - Case Closed
Southern Pacific	1001 El Camino Real	Completed - Case Closed
Belmont Car Wash	1051 El Camino Real	Completed - Case Closed
Texaco	1200 El Camino Real	Completed - Case Closed
Acme Movers	1309 Elmer St	Completed - Case Closed
Lo Coco Liquors	1340 El Camino Real	Completed - Case Closed
Sam Trans	580 Quarry Rd	Completed - Case Closed
Peninsula Card Lock	610 Harbor Blvd	Completed - Case Closed
Unocal Station #4519	699 Ralston Ave	Completed - Case Closed
Apollo Oil	701 Harbor Blvd	Completed - Case Closed
City Of Belmont Fire Dept	875 O'Neill Ave	Completed - Case Closed
Vancea Auto Services	900 El Camino Real	Completed - Case Closed
Post Office Parlor	935 Old County Rd	Completed - Case Closed
Chevron 9-0578, Former	990 El Camino Real	Completed - Case Closed
Belmont 76 Service Center	995 Ralston Ave	Completed - Case Closed
State Response		
Western Grinding Services	601 Harbor Blvd	Certified

Notes:

1. Site Definitions:

Cleanup Program Site: regulates and oversees the investigation and cleanup of 'non-federally owned' sites where recent or historical unauthorized releases of pollutants to the environment, including soil, groundwater, surface water, and sediment, have occurred.

LUST Cleanup Site: The prevention, cleanup, and enforcement of water degradation or pollution associated with underground storage tanks. Underground storage tanks are defined as one or more tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground.

State Response: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

2. Status Definitions:

Certified: Identifies completed sites with previously confirmed release that are subsequently certified by DTSC as having been remediated satisfactorily under DTSC oversight.

Completed – Case Closed: A closure letter or other formal closure decision document has been issued for the site.

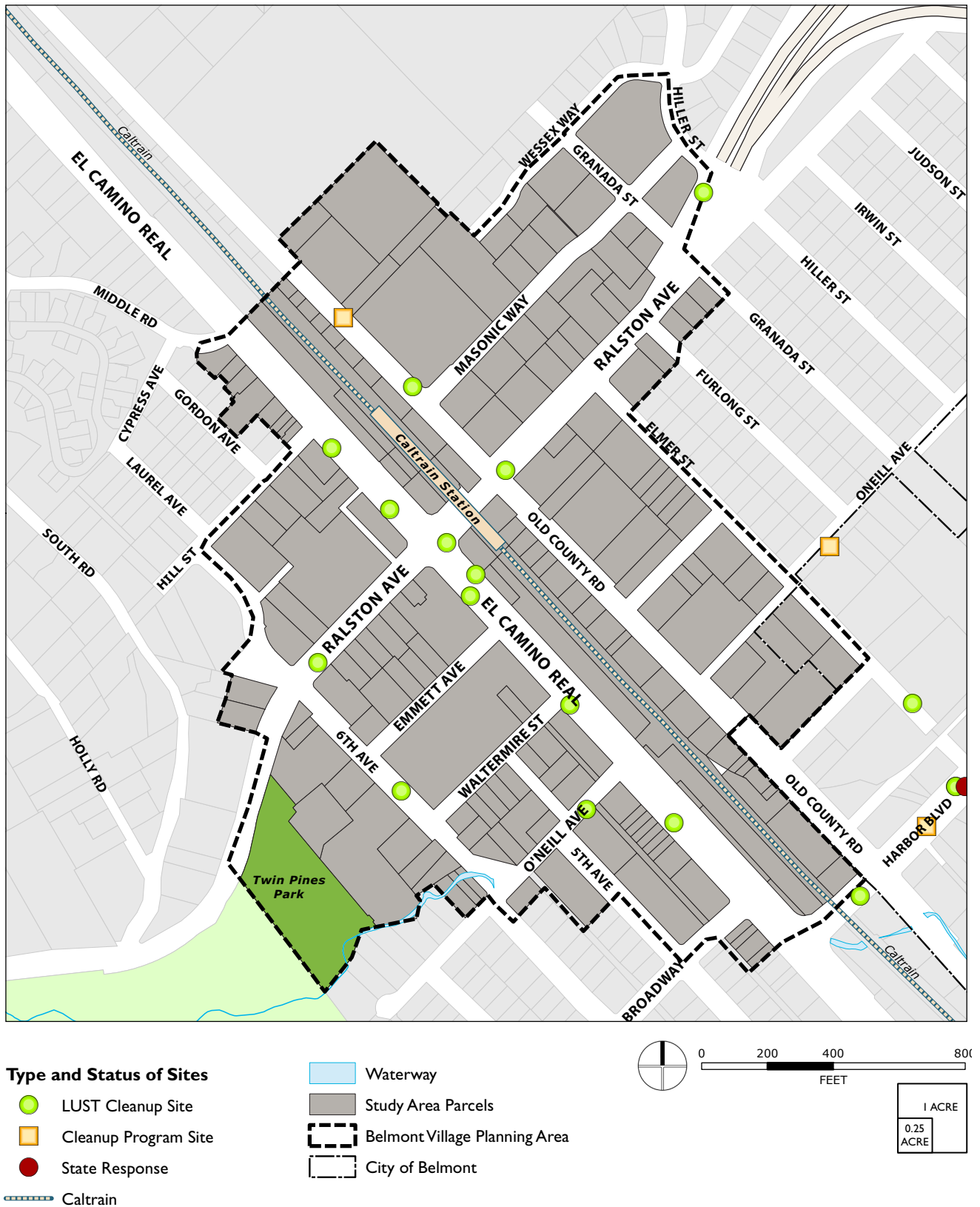
Open – Inactive: No regulatory oversight activities are being conducted by the Lead Agency.

Open – Remediation: An approved remedy or remedies has/have been selected for the impacted media at the site and the responsible party (RP) is implementing one or more remedy under an approved cleanup plan for the site.

Open – Site Assessment: Site characterization, investigation, risk evaluation, and/or site conceptual model development are occurring at the site.

Source: GeoTracker, State Water Resources Control Board (SWRCB); Envirostor, Department of Toxic Substances Control (DTSC), 2016.

FIGURE 6-4: HAZARDOUS MATERIALS SITES



Source: Geo Tracker, State Water Resources Control Board (SWRCB), 2016
 Envirostor, Department of Toxic Substances Control (DTSC), 2016
 City of Belmont, 2014; San Mateo County Assessor's Parcel Database, 2014

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TOXIC AIR CONTAMINANTS

Another challenge for new development is providing adequate buffers between sensitive receptors and existing and potential sources of toxic air contaminants (TACs), such as dry cleaners using perchloroethylene (perc dry cleaners), gas stations, autobody shops, film processing services, and others. TACs are air pollutants that may cause or increase mortality or serious illness, or that may pose a present or potential hazard to human health. These are typically linked to short-term (acute) or long-term (chronic and/or carcinogenic) adverse human health effects.

Sources of TACs in the Planning Area

Mobile TAC sources in the Planning Area include Highway 101 and El Camino Real due to the associated car and truck traffic. Train traffic on the Caltrain tracks is also a mobile TAC source, though this source is expected to pose less of a risk following completion of the Caltrain electrification project in 2021. Based on recommendations from the Bay Area Air Quality Management District (“Air District”), installation of indoor air quality equipment is required for development projects within 1,000 feet of mobile TAC sources. The Specific Plan also includes policies to reduce emissions from mobile sources by promoting mixed uses, alternative modes of transportation, and reduced number and length of vehicle trips through various transportation demand management measures.

Stationary TAC sources in and adjacent to the Planning Area are mapped in Figure 6-5 and identified by plant number. Table 6-2 identifies stationary TAC sources by plant number and provides additional information about risks in comparison to risk thresholds from the Air District for cancer as well as particulate matter in the form of PM2.5.



Autobody shops and gas stations can be potential sources of toxic air contaminants (TACs).

To ensure that future development is fully consistent with Air District requirements and best practices associated with reducing the health risks of air pollutants, the Plan's policies focus on reducing exposure to harmful pollutants, particularly for sensitive receptors, such as residences, senior and nursing homes, hospitals, schools, and day care facilities. Similar to parcels with hazardous materials contamination, sites on or adjacent to existing stationary TAC sources must undergo more study to ensure that sensitive receptors are not exposed to potential health risks. It is important to note that Table 6-2 provides the local risk on site, not to the surrounding area. Project proponents must determine, if they are near a stationary source, whether the risks at their particular sites exceed risk thresholds. If a risk threshold level is exceeded for any project, additional mitigation measures would be necessary to ensure the health risks are acceptable according to the Air District.

While the Planning Area includes several stationary sources, few exceed TAC risk thresholds, which require mitigation to reduce the health risk. The California Air Resources Board (ARB) recommends siting sensitive land uses (e.g., residences, schools, daycare centers, playgrounds, medical facilities) at least 300 feet from any large gas station or perc dry cleaner, or including site-specific design measures to mitigate the health risk. These recommendations apply to the gas station at 699 Ralston Avenue, which exceeds TAC risk thresholds; the perc dry cleaners and the gas station at 955 Ralston Avenue do not exceed TAC risk thresholds and do not pose a risk for siting sensitive land uses. The spray booths in the Planning Area also do not exceed TAC risk thresholds. While Belmont Village contains multiple diesel generators that surpass TAC significance thresholds, it is not possible to establish a standard safe distance from generator sites, as their risk varies significantly with the age of the generator itself. When possible, older generators should be retrofitted.



Policies in this Plan address siting sensitive uses in areas with existing light industrial and service commercial establishments.

Table 6-2: Stationary Sources of TACs in or Adjacent to the Planning Area

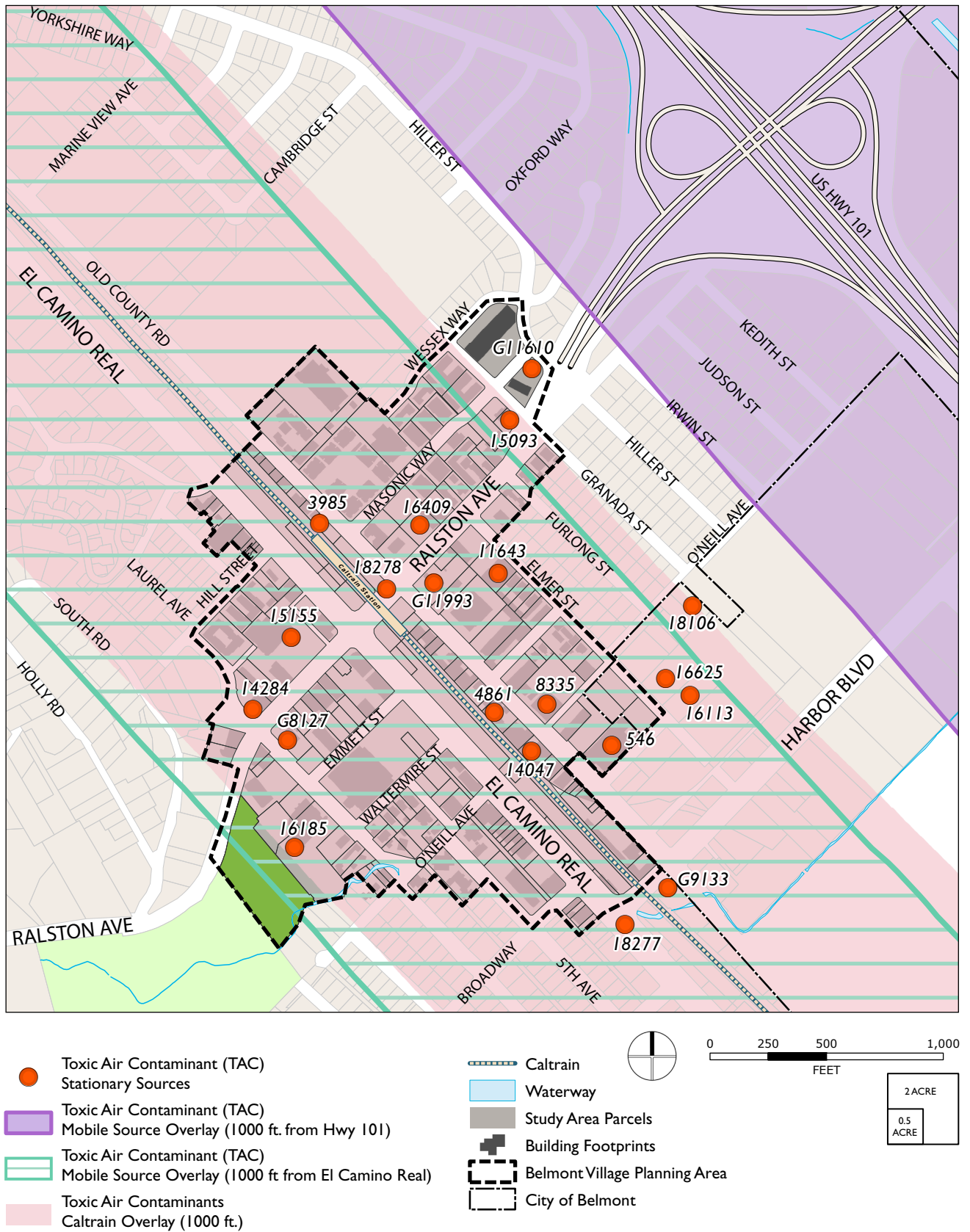
Plant #	Facility Name	Source Type	Street	Cancer Risk (per million)	PM2.5 (ug/m ³)
				Threshold: 1 in a million	Threshold: 12 ug/m ³
16185	City of Belmont	Generator	1070 Sixth Avenue Suite 300	55.39	0.07
G8127	Belmont 76 Service	Gas station	995 Ralston Avenue	29	n/a
14284	Ralston Village Cleaners	Perc Dry Cleaner	980 Ralston Avenue	n/a	n/a
15155	Holiday Cleaners Belmont	Perc Dry Cleaner	880 Ralston Avenue	n/a	n/a
3985	Richard's Dry Cleaners	Perc Dry Cleaner	940 Old County Road	n/a	n/a
18278	City of Belmont	Generator	Old County Road and Ralston Avenue	0.004	0.0001
G11993	G & G Greco	Gas station	699 Ralston Avenue	61.8	n/a
16409	Park Avenue Cleaners	Perc Dry Cleaner	678 Ralston Avenue	n/a	n/a
15093	Belmont Fire Dept Station 14	Generator	911 Granada Street	102.4	0.133
G11610	Hal Mini Mart	Gas station	470 Ralston Avenue	24.96	n/a
11643	DryBay, Inc ¹	n/a	1050 Elmer Street Unit C	n/a	n/a
14047	Xtreme Auto Body ¹	n/a	1300B Old County Road	0	n/a
5141	Fiberglass Unlimited, Inc ¹	n/a	151 Old Country Road Suite J	0	0
4861	Cologne Auto Body	Spray Booth	1250 Old County Road	0	0
8335	Fineline Carpentry Inc ¹	n/a	1297 Old County Road	0	0
546	Peterson Products, Inc (now vacant) ¹	n/a	1325 Old County Road	0.002	0.009
18277	City of Belmont	Generator	El Camino Real Boulevard and Harbor Boulevard	0.0056	0.0001
16113	Bay Pacific A/B	Spray Booth ²	1305 Elmer Street	0	0
16625	The Village Collection	Spray Booth ²	1303E Elmer Street	0	0
18106	Auto Masters Custom ¹	n/a	505 O'Neill Avenue	0	0
G9133	Belmont Apollo Inc	Gas station	701 Harbor Boulevard	n/a	n/a

Notes:

1. "Source Type" is not provided for sites with no risk or very low risk and further study is not required.
2. For select Spray Booth sites, 2011 screening level data was used when data for 2014 was not available.

Source: BAAQMD, 2016; Dyett & Bhatia, 2016.

FIGURE 6-5: TOXIC AIR CONTAMINANT SOURCES & OVERLAY ZONES



Source: Bay Area Air Quality Management District (BAAQMD), Risk & Hazard Stationary Source, 2016; City of Belmont, 2014; San Mateo County Assessor's Parcel Database, 2014

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GOALS AND POLICIES

GOAL 6.4 Ensure that infill development projects minimize exposure to hazardous materials and toxic air contaminants.

Policy 6.4-1 Require remediation and cleanup of any contaminated sites in the Belmont Village Planning Area to levels required for the proposed new land use, where hazardous materials have impacted soil, surface water, or groundwater. Remediation and cleanup will be in compliance with federal and State standards. Documentation of the site investigation and cleanup must be provided to City staff during development project review.

Policy 6.4-2 Require new residential projects and other new sensitive receptors such as schools, daycares, nursing and retirement homes located within 1,000 feet of Highway 101, El Camino Real, or the Caltrain tracks to install indoor air quality equipment, such as enhanced air filters (air filters rated at a minimum efficiency reporting value (MERV) 13 or higher) or equivalent mechanisms, to minimize health risks for future residents.

Policy 6.4-3 Require proponents of projects within 100 feet of existing hazardous materials case sites or TAC stationary sources, or 300 feet of gas stations or perc dry cleaners, to investigate 1) the site's health risk, 2) applicable Air District risk standards, 3) use compatibility at the location in question (some kinds of uses might be at lower risk than others), and 4) potential feasible design-related risk mitigation measures. If the investigation results show that the health risk exceeds the Air District standards for toxic air contaminants, require project proponents to include design-related risk mitigation measures, such as upgraded ventilation systems with high efficiency filters (air filters rated at a minimum efficiency reporting value (MERV) 13 or higher) or equivalent mechanisms, to minimize health risks for future residents. Existing stationary TAC sources are mapped in Figure 6-5; however, project proponents are expected to check Air District databases for the latest data on stationary TAC sources and risk

standards. Project proponents must provide evidence to the City of consultation with the Air District and the RWQCB in making refinements to project designs to reduce applicable hazardous materials and/or toxic air contaminant risk.

- Policy 6.4-4** When project sites exceed TAC risk thresholds, require any projects that are developed in phases over several years to build residential units and/or sensitive land uses that are closest to the TAC source at the latest date possible.
- Policy 6.4-5** Require development projects with sensitive receptors, such as residences, senior and nursing homes, schools, daycare facilities, and hospitals, that are located within 300 feet of TAC stationary sites containing older generators to install air filters rated at a minimum efficiency reporting value (MERV) 13 or higher.
- Policy 6.4-6** Encourage existing uses to retrofit generators with Best Available Control Technology to meet ARB's Tier 4 emission standards. Encourage the use of zero emission back-up power.
- Policy 6.4-7** Implement the recommendations in the City's transportation studies, such as those in the Ralston Avenue Corridor Study, to ease congestion, improve multi-modal mobility, and reduce traffic-generated exhaust. (General Plan Policies under Goal 3.10 in the Circulation Element).
- Policy 6.4-8** Consistent with the goals and policies in the General Plan's Land Use Element and development patterns shown on the General Plan Land Use Diagram, promote mixed-use development in the Village and along the El Camino Real Corridor that is supportive of alternative modes of transportation (public transit, walking, bicycling, etc.) and lessens the need for and length of vehicle trips.
- Policy 6.4-9** Require new large commercial projects to prepare a loading plan aimed to minimize truck idling and reduce diesel particulate emissions related to truck loading.
- Policy 6.4-10** Support citywide initiatives to target purchase of new or conversion of existing government vehicles to more efficient vehicles, encourage staff to drive minimally and efficiently, and mandate government operations idling policy at all municipal buildings in the Village.

6.4 NOISE



The two largest contributors to noise in the Planning Area are rail and automobile traffic.

Noise can be defined as unwanted sound. Excessive noise exposure can cause adverse physical and psychological responses, in addition to interfering with speech, concentration, and performance. Noise from motor vehicles and aircraft operations are regulated by State and federal agencies. Noise considerations also inform the location of industrial land uses and transportation facilities, since they are common sources of excessive noise levels; and the location of noise-sensitive uses such as residences, schools, churches, and hospitals, so that they may be less affected by noise.

TRAFFIC NOISE

The Planning Area's proximity to major traffic corridors results in significantly elevated noise levels compared to the rest of Belmont. The area's most extensive noise source is street traffic noise from US Highway 101, El Camino Real and Ralston Avenue. Almost the entire Planning Area experiences noise levels over 65 dB DNL, which is considered the upper limit of the "normally acceptable" range for multi-family housing. Areas fronting the major roadways generally have the highest noise levels.

RAILROAD NOISE

The diesel-powered Caltrain commuter rail line runs through the middle of the Planning Area, parallel to El Camino Real. Union Pacific runs diesel-powered freight trains along the rail lines during periods when Caltrain is not using the tracks, particularly in the late evening or early morning. The diesel trains do have noise associated with them; however, it is much less substantial than roadway and vehicular traffic in the Planning Area. In addition, noise from trains occurs intermittently, for short periods, in contrast to the virtually constant presence of automobile-generated noise. There are plans to modernize and electrify the rail line in coming years, which will provide a number of benefits for the Belmont community including reduced noise. Electrification of Caltrain is anticipated to be completed in 2021.

Existing noise levels are shown in Figure 6-6. Future development within the Planning Area will be constructed in areas that already experience high noise levels, and elevated noise levels are expected to continue over the planning horizon of the Specific Plan, as shown in Figure 6-7. A vibrant, mixed-use town center will bring restaurants and retail establishments that receive truck deliveries, which may increase noise

levels. While the Caltrain electrification will reduce some noise, diesel trains will likely continue to run at night. Traffic volumes and associated noise will also increase as a result of new development in the Planning Area. In this noise-elevated environment, growth is anticipated, and future development will include sensitive receptors (such as residences, nursing homes, hospitals, schools, and daycare facilities).

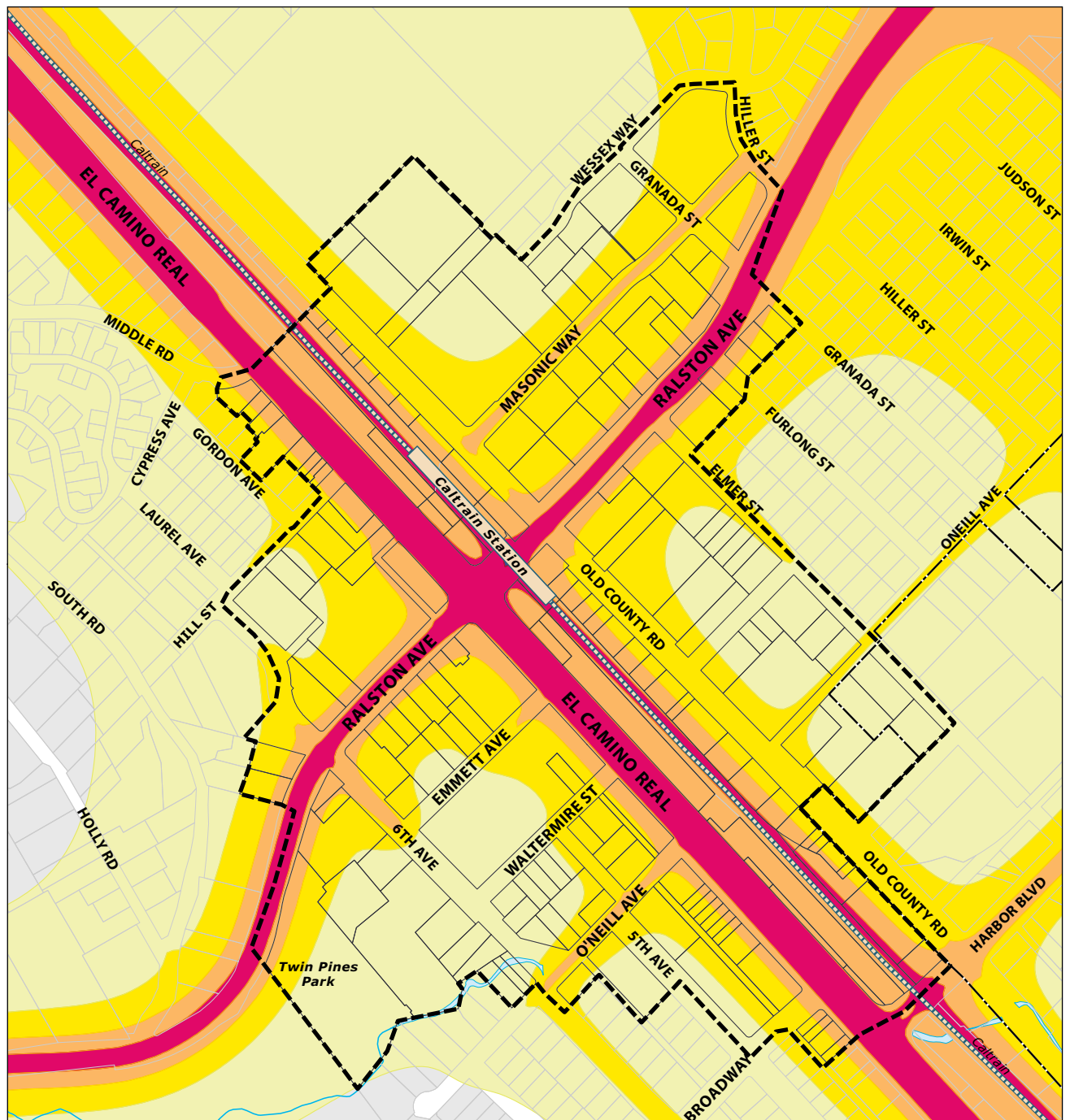
While the General Plan establishes maximum outdoor noise standards of 65 dB citywide, Belmont Village is excluded from these standards in order to allow development and transformation of the Village into a vibrant activity center. Development projects are required to incorporate noise mitigation measures to strive to meet the City's exterior noise standards; however, they may be exempt from meeting the requirement if noise mitigation measures are incorporated into the project and an acoustical analysis by a licensed acoustical engineer determines that the project cannot meet the exterior noise standard. Additional noise mitigation measures may be necessary in future development, especially for sensitive receptors, in order to comply with State building standards, which specify that noise levels generated by exterior noise sources shall not exceed 45 dB in any habitable room with windows closed. These noise mitigation measures may include:

- Constructing facades with substantial weight and insulation;
- Sound-rated windows with enhanced noise reduction for habitable rooms;
- Sound-rated doors with enhanced reduction for all exterior entries for habitable rooms;
- Minimum setbacks and exterior barriers;
- Acoustic baffling of vents for chimneys, attic and gable ends; and/or,
- Installation of mechanical ventilation systems affording comfort and fresh air under closed window conditions.



Development adjacent to areas with heavy automobile traffic must incorporate noise attenuation measures.

FIGURE 6-6: CURRENT NOISE CONTOURS



Existing Noise Contours

- DNL 60 - 65 dB
- DNL 65 - 70 dB
- DNL 70 - 75 dB
- DNL 75 - 80 dB
- DNL > 80 dB

- Caltrain
- Waterway
- Study Area Parcels
- Belmont Village Planning Area
- City of Belmont



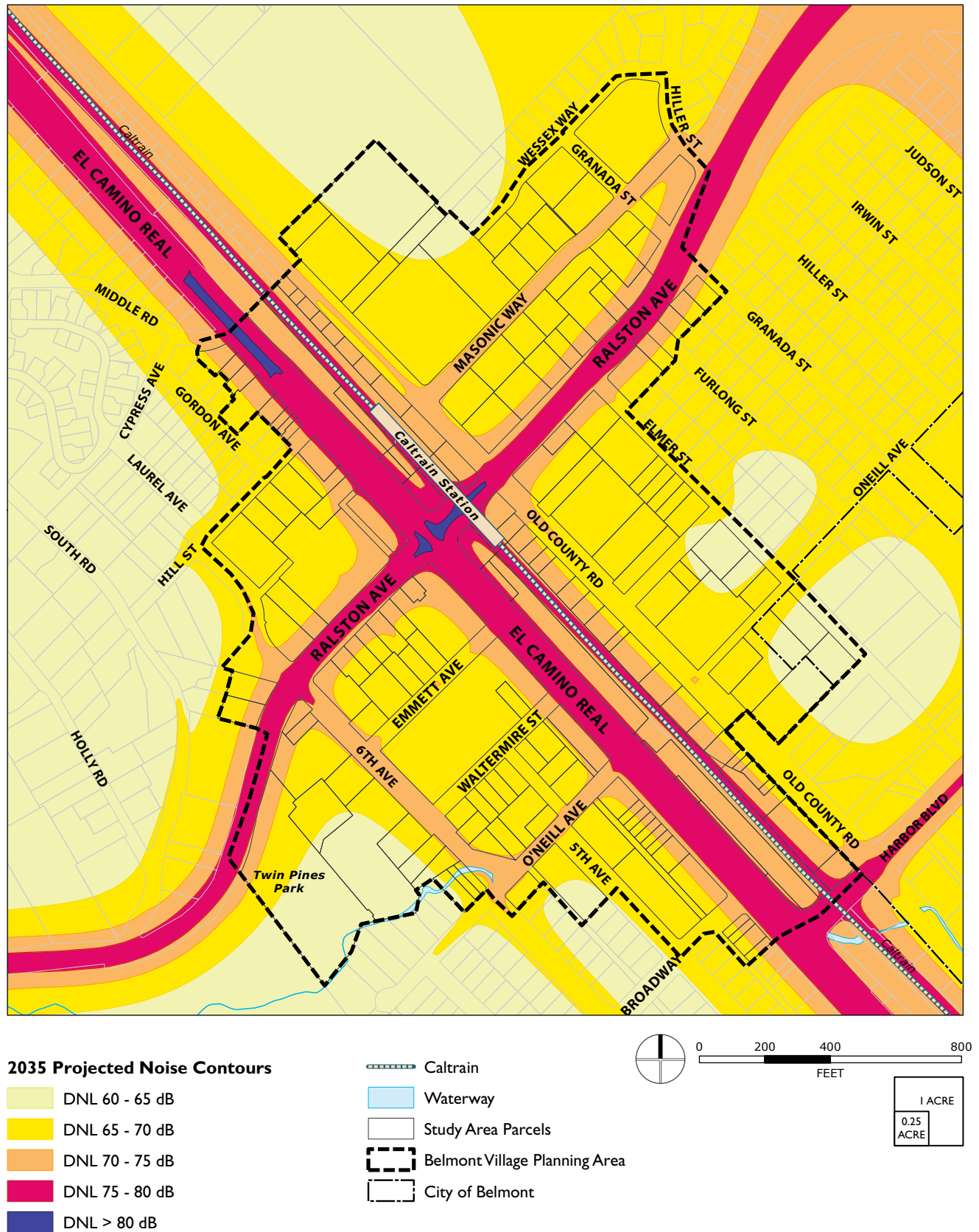
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Source: Charles M. Salter Associates, 2017; Kittelson & Associates, 2016;
City of Belmont, 2016; Dyett & Bhatia, 2016

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FIGURE 6-7: FUTURE NOISE CONTOURS



Source: Charles M. Salter Associates, 2017; Kittelson & Associates, 2016;
City of Belmont, 2015; Dyett & Bhatia, 2016

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GOALS AND POLICIES

GOAL 6.5 Maintain a healthy noise environment in the Belmont Village Planning Area while accommodating the increased intensities and mix of uses intended to characterize Belmont Village in the future.

Policy 6.5-1 Require residential and other noise-sensitive land uses within the 65 dB contours, as shown in Figure 6-6, to incorporate adequate noise attenuation into the design and site planning of the project in order to achieve an interior noise level of not more than 45 dBA. Ensure that adequate noise attenuation methods are incorporated in new development prior to the issuance of building permits.

Policy 6.5-2 Require projects in the Belmont Village Planning Area to incorporate noise mitigations to strive to achieve City standards for exterior noise levels. However, after incorporating noise mitigations, if a project still cannot achieve City standards for exterior noise levels, as determined by acoustical analysis by a licensed acoustical engineer, project sponsors may apply for an exception to City exterior noise standards.

- Such exception requests will be considered through a discretionary development entitlement process.
- Projects requesting exceptions to exterior noise standards should demonstrate that:
 - (1) all feasible noise mitigations have been incorporated to lower exterior noise levels as close as possible to City standards; and
 - (2) noise mitigations that lower interior noise levels below the City and State standard of 45 dB have been incorporated, to compensate for the high exterior noise levels which make outdoor activities uncomfortable.

Policy 6.5-3 Require developers to mitigate noise exposure to sensitive receptors from construction activities. Mitigation may include a combination of techniques that reduce noise generated at the source, increase the noise insulation at the receptor, or increase the noise

attenuation as noise travels from the source to the receptor (e.g. through the incorporation of barriers).

- Policy 6.5-4** Require development projects to include mitigation measures to protect the development from ground borne vibration from the railway if located within 120 feet of the centerline of Caltrain rail tracks (See General Plan Policy 7.1-11).

GOAL 6.6 Maintain land use compatibility with the San Carlos Airport to minimize the public's exposure to noise and other safety hazards.

- Policy 6.6-1** Require new development located in the San Carlos Airport Influence Area (AIA) to comply with applicable land use compatibility provisions of the San Carlos ALUCP through review and approval of a site development plan, or other development permit. Unless otherwise approved by City Council in accordance with the provisions of Public Utilities Code Section 21675.1(d), development proposals must be consistent or conditionally consistent with applicable land use compatibility policies with respect to noise, safety, airspace protection, and overflight notification, as contained in the San Carlos ALUCP. Additionally, development proposals must meet FAA requirements with respect to building height as well as the provision of obstruction lighting when appurtenances are permitted to penetrate the transitional surface (a 7:1 slope from the runway primary surface). Consider C/CAG recommendations in the review of development proposals.

- Policy 6.6-2** Coordinate with C/CAG and the FAA to protect public health, safety and welfare by ensuring the orderly operation of the airport and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around the airport. Comply with the land use compatibility requirements of the ALUCP unless the City Council formally overrides an ALUC consistency determination in accordance with Section 21675.1(d) of the Public Utilities Code.

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